



# Project 3: Remote Batch System

NP TA 誌佑

**12/01 18:20**

Project 3 Deadline

Demo: 12/03 Thu.

# Remote Batch System



- Requirements
  - A simple HTTP server
  - A CGI program
- Part 1: Run in **NP Linux Workstation**
- Part 2: Run in **Windows 10**

# Project 3: Demo



- 12/01 Thu. 10:00 ~ 18:30
- We will announce demo slots 2 ~ 3 days before
- Tasks:
  - Pass test cases
  - Answer questions
  - Implement 1 extra function within a limited time

---

# Execution Flow

# Run HTTP Server

---

client



http\_server

nplinux1  
port: 8080

# Request 1 - Send

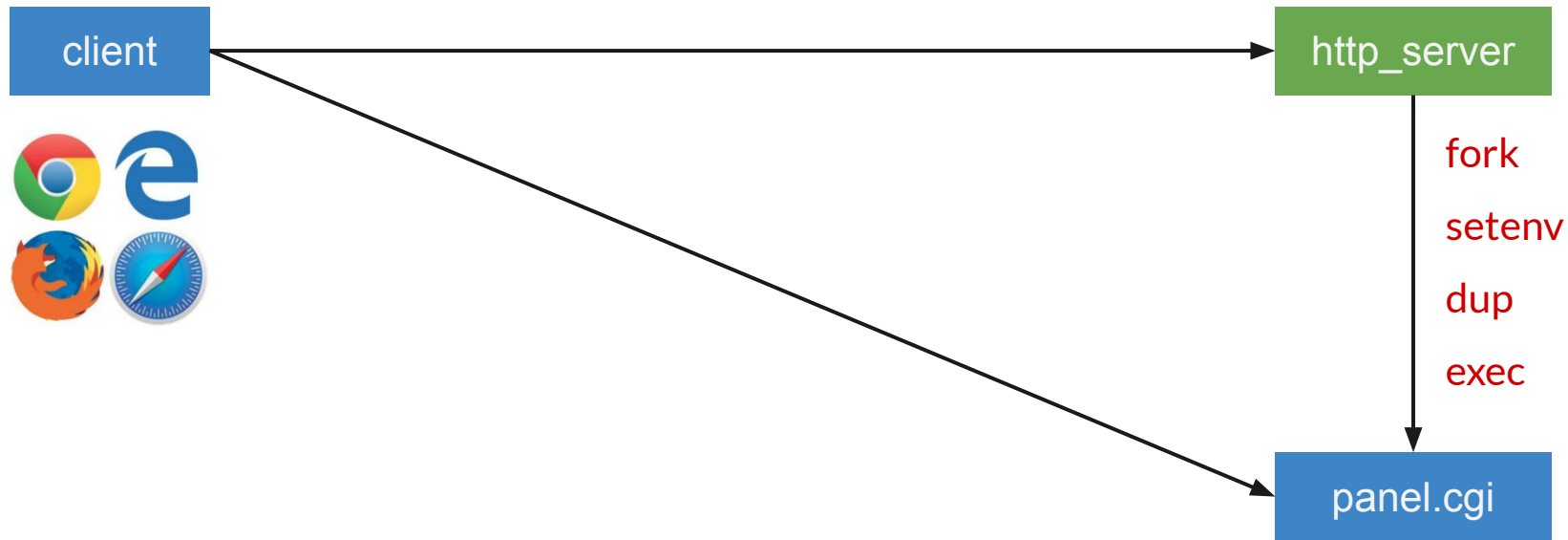


# Request 1 - Receive

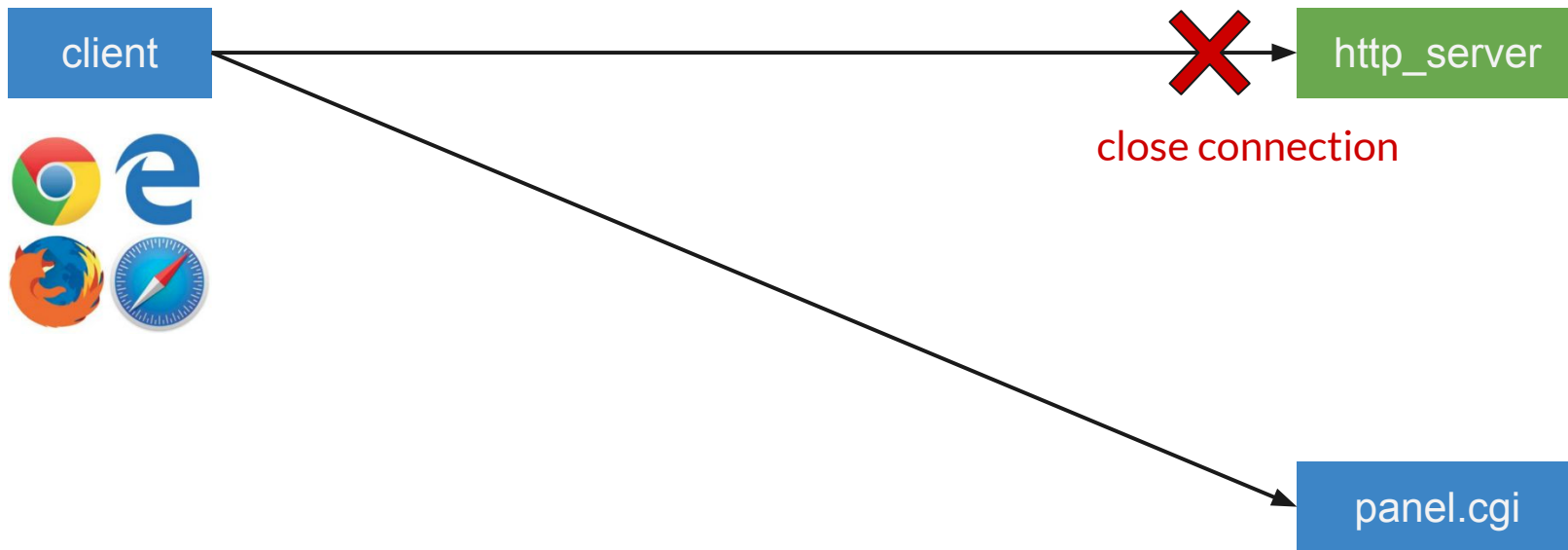




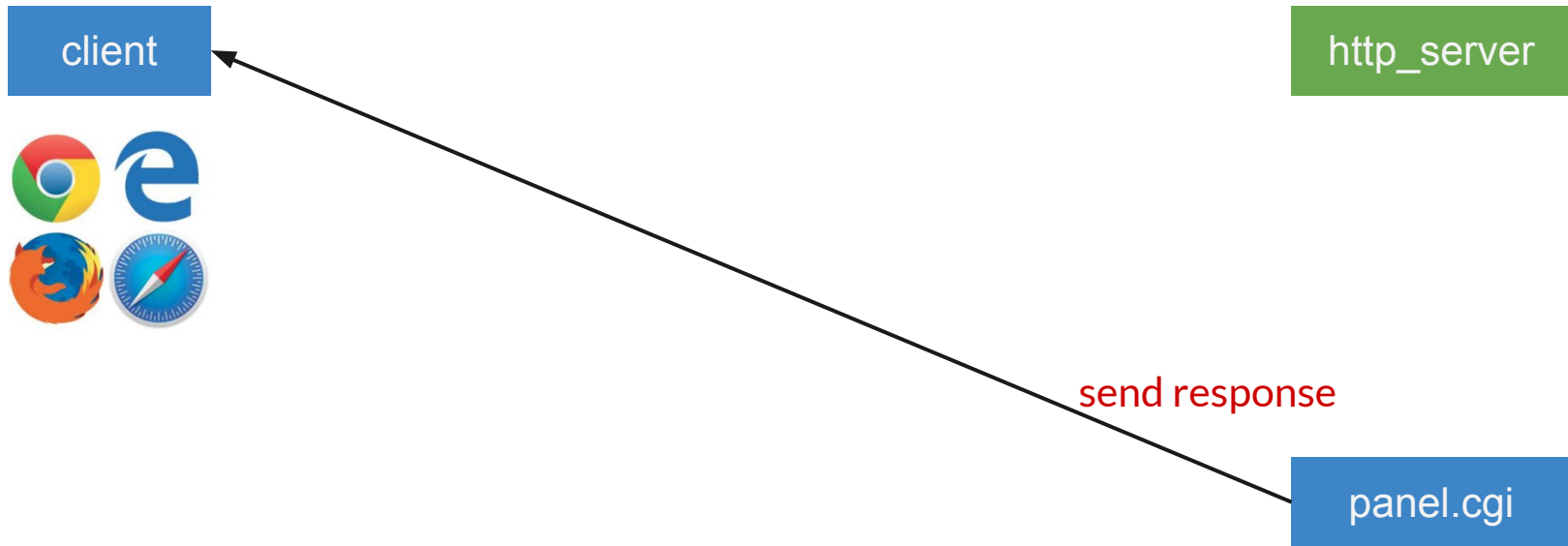
# Request 1 - Execute CGI Program



# Request 1 - Close Connection



# Request 1 - Response



# Request 1 - Terminate

client



http\_server

child exit

panel.cgi

# Page Generated by panel.cgi

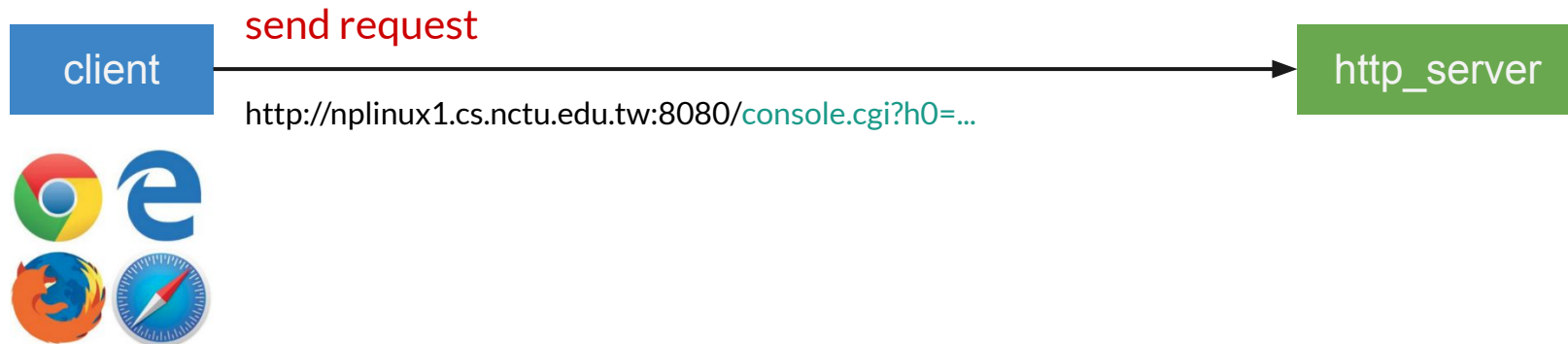
NP Project 3 Panel

nplinux1.cs.nctu.edu.tw:8080/panel.cgi

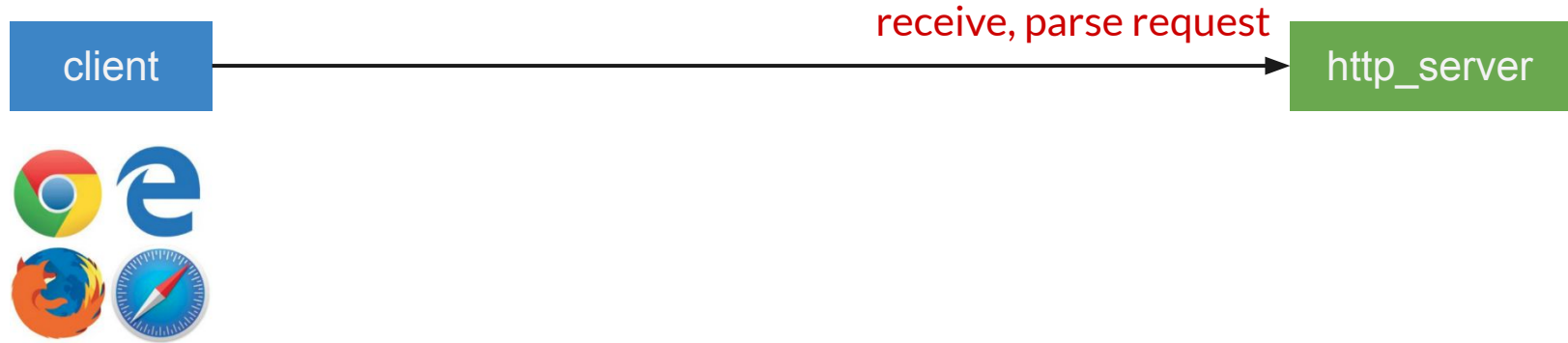
#	Host	Port	Input File
Session 1	nplinux1 ▾ .cs.nctu.edu.tw	1234	t1.txt ▾
Session 2	nplinux2 ▾ .cs.nctu.edu.tw	5678	t2.txt ▾
Session 3	▾ .cs.nctu.edu.tw		▾
Session 4	▾ .cs.nctu.edu.tw		▾
Session 5	▾ .cs.nctu.edu.tw		▾

Run

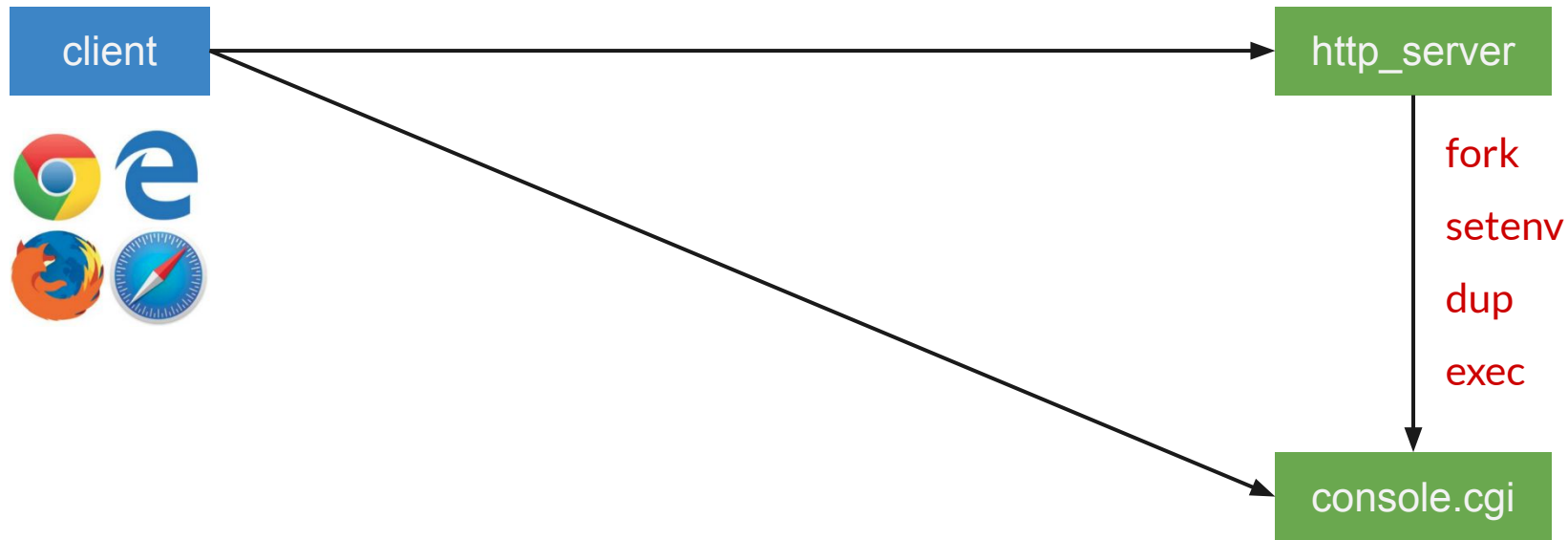
## Request 2 - Send



# Request 2 - Receive

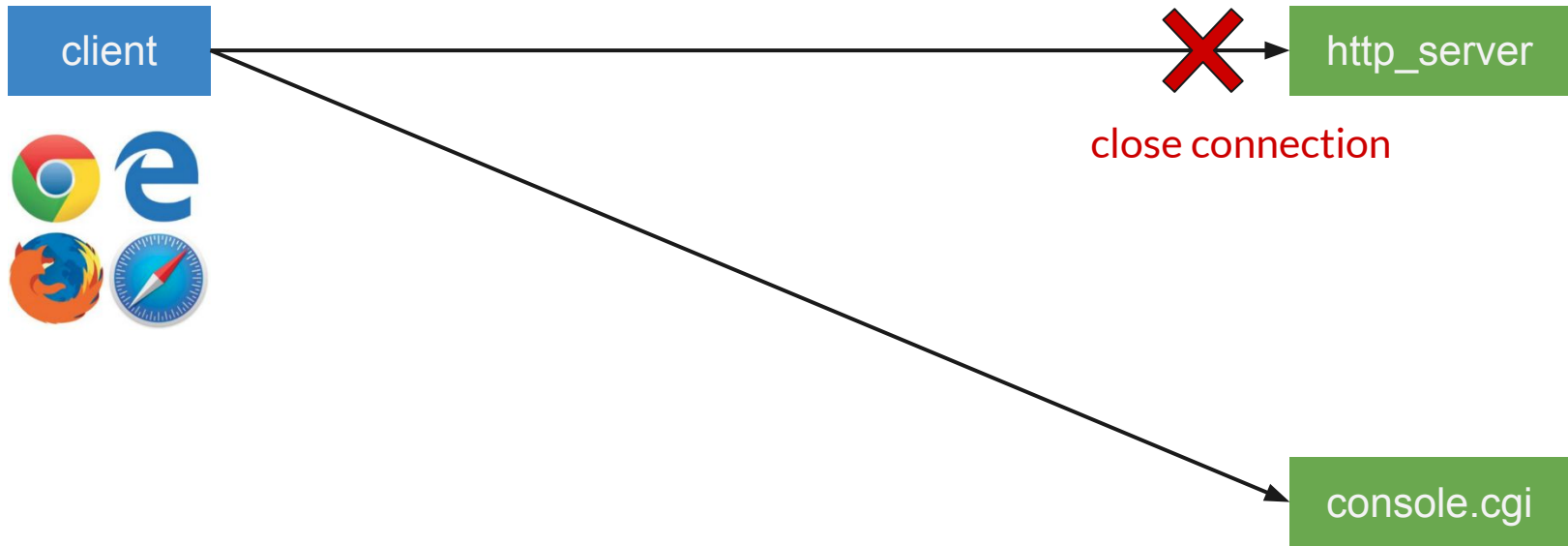


## Request 2 - Execute CGI Program

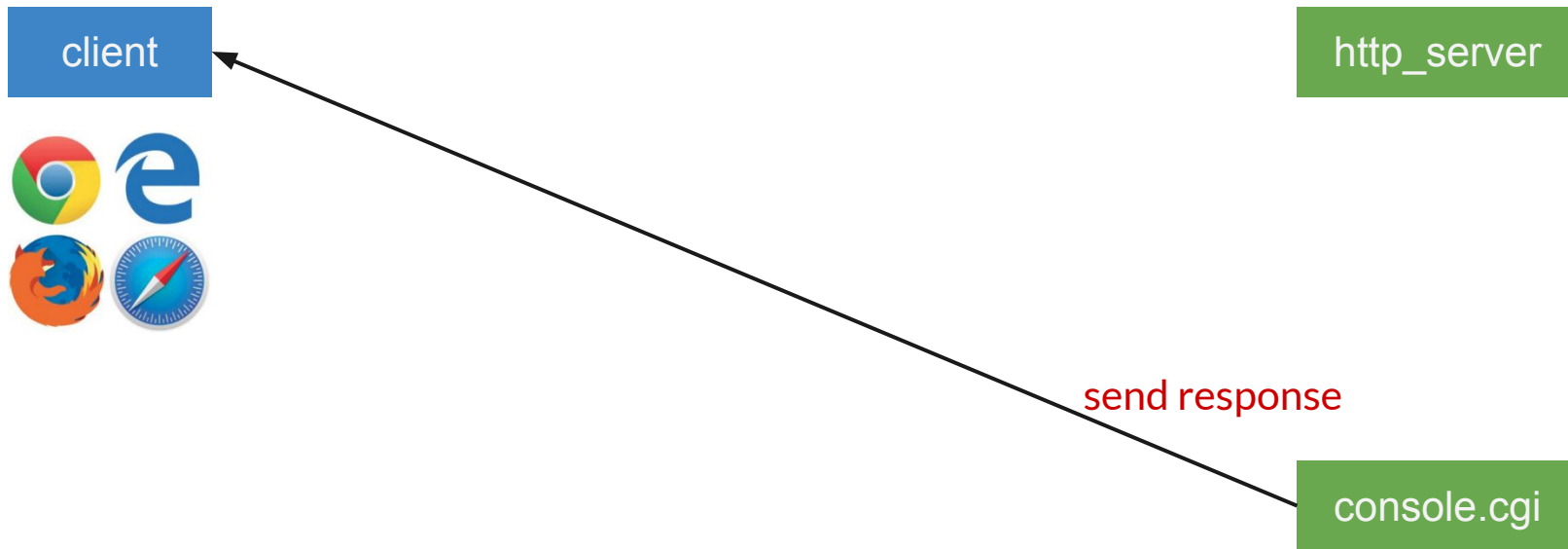




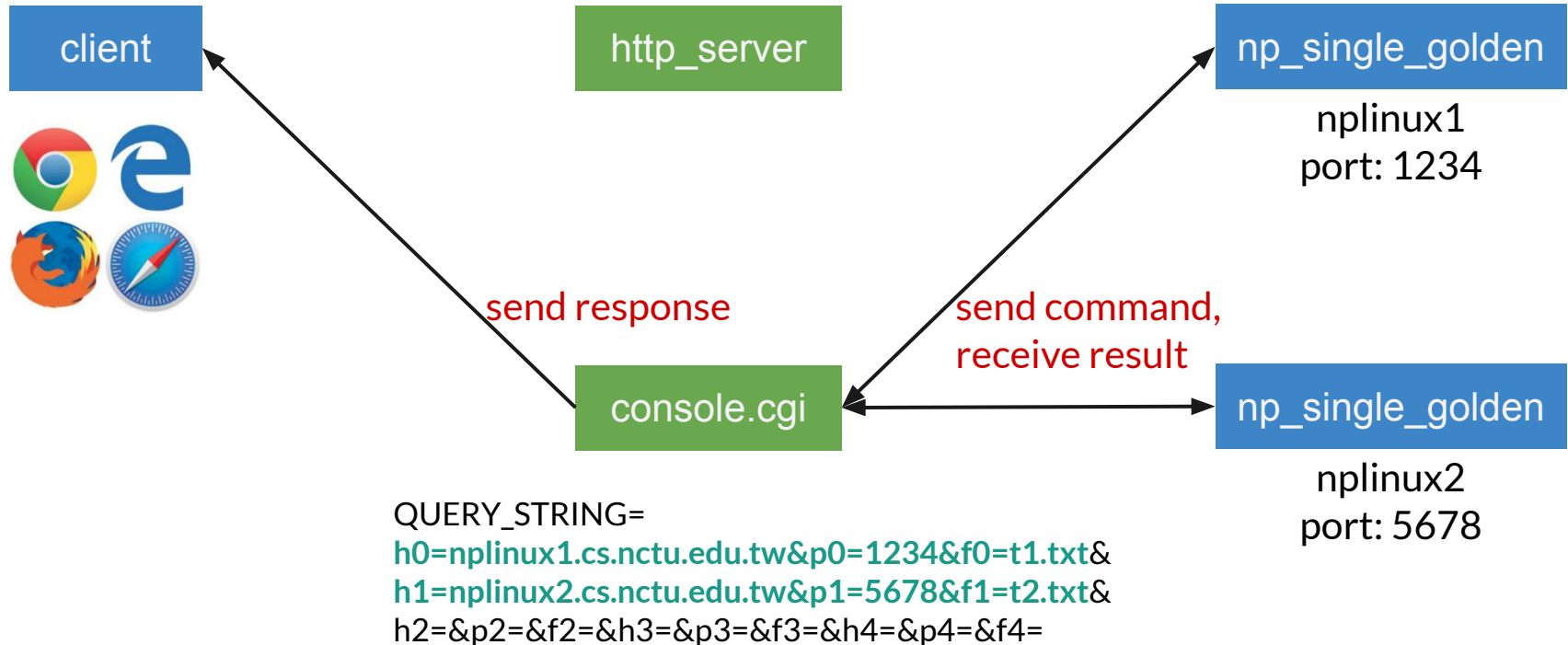
## Request 2 - Close Connection



## Request 2 - Response

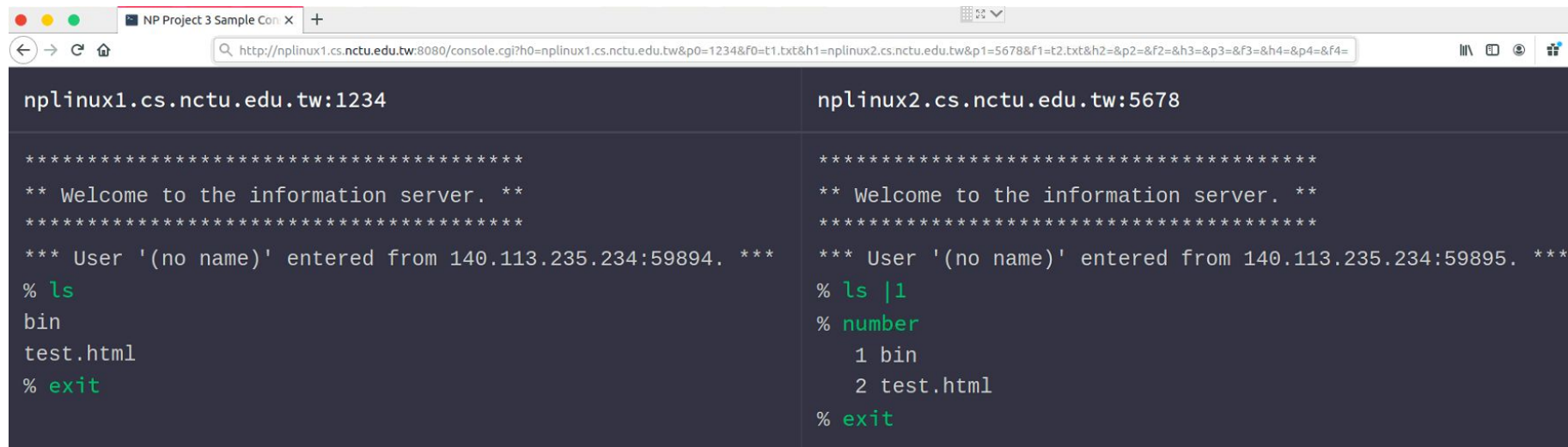


## Request 2 - Connect Servers



# Page Generated by console.cgi

- Display hostname and port of the remote server in each session
- Make sure the commands are displayed in the right order, at the right time, and can be easily distinguished from the outputs



```
NP Project 3 Sample Con X +
http://nplinux1.cs.nctu.edu.tw:8080/console.cgi?h0=nplinux1.cs.nctu.edu.tw&p0=1234&f0=t1.txt&h1=nplinux2.cs.nctu.edu.tw&p1=5678&f1=t2.txt&h2=&p2=&f2=&h3=&p3=&f3=&h4=&p4=&f4=

nplinux1.cs.nctu.edu.tw:1234
*****
** Welcome to the information server. **
*****
*** User '(no name)' entered from 140.113.235.234:59894. ***
% ls
bin
test.html
% exit

nplinux2.cs.nctu.edu.tw:5678
*****
** Welcome to the information server. **
*****
*** User '(no name)' entered from 140.113.235.234:59895. ***
% ls |1
% number
  1 bin
  2 test.html
% exit
```